

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* THANGARAJ VEERAPPAN and BRENDAN MURRAY

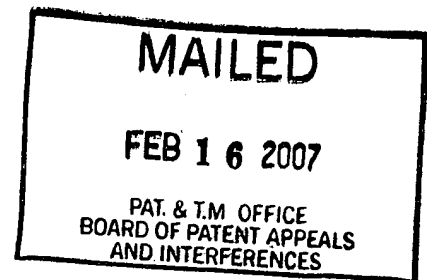
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Appeal 2006-2932  
Application 10/042,192  
Technology Center 2100

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Decided: February 16, 2007

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Before JAMES D. THOMAS, MAHSHID D. SAADAT, and  
JEAN R. HOMERE, *Administrative Patent Judges*.

THOMAS, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134 Appellants have appealed to the Board from the Examiner's Final Rejection of claims 1 through 40 on appeal. An oral hearing in this appeal occurred on February 8, 2007.

Representative independent claim 1 is reproduced below:

1. A method for determining a language in which a document is created comprising the steps of:

receiving at least one electronic document that includes a character string, wherein characters in the character string are represented in at least one of a plurality of character sets corresponding to an undetermined language;

evaluating at least a portion of the character string by comparing each of the characters in the portion of the character string to a plurality of predetermined candidate character sets to determine one or more matches between the plurality of predetermined candidate character sets and the characters in the portion of the character string;

determining whether one or more character sets that match the characters in the portion of the character string correspond to one or more supported languages; and

identifying one or more supported languages in which the electronic document is created based on a determination that the one or more character sets that match the characters in the portion of the character string correspond to one or more supported languages.

The following references are relied upon by Examiner:

|          |                 |               |
|----------|-----------------|---------------|
| Watanabe | US 6,104,381    | Aug. 15, 2000 |
| Schulze  | US 6,167,369    | Dec. 26, 2000 |
| Peng     | US 6,252,671 B1 | Jun. 26, 2001 |

Claims 1 through 40 stand rejected under 35 U.S.C. § 103. As evidence of obviousness as to claims 1 through 4, 6 through 14, 16 through 24, 26 through 34 and 36 through 40, the Examiner relies upon Peng in view of Watanabe, with the addition of Schulze as to claims 5, 15, 25 and 35.

Rather than repeat the positions of the Appellants and the Examiner, reference is made to the Brief and Reply Brief for Appellants' positions, and to the answer for the Examiner's positions.

#### OPINION

We affirm.

For the reasons set forth by the Examiner in the Answer, as slightly modified here, we sustain the rejections of all claims on appeal under 35 U.S.C. § 103. Appellants present arguments only as to independent claim 1 as representative of the other independent claims 11, 21 and 31. No arguments are presented before us as to any dependent claims within the first stated rejection relying upon Peng in view of Watanabe. Brief arguments are presented as to the second stated rejection additionally relying upon Schulze as to claim 5, which is considered representative of the other dependent claims 15, 25 and 35 in that rejection.

In the initial statement of the Examiner's rejection of representative independent claim 1 on appeal at pages 4 and 5 of the Answer, the Examiner is of the belief that Peng fails to disclose a character string. From our review of Peng it appears that this reference does teach this feature. Beginning with the discussion at column 1, Peng characterizes his information as characters or character data or character sets (figure 1) or character strings (such as figures 3 and 4). As to figures 3 and 4, note the discussion in the paragraph bridging columns 4 and 5. Character strings are illustrated in figures 3 and 4 as elements 136. Moreover, the teachings relied upon by the Examiner at the middle of column 11 of Watanabe buttress these teachings and showings in Peng by characterizing character signals as character strings. In this

respect then, Watanabe is merely cumulative to what has already been taught in Peng.

As to the first stated rejection, Appellants' arguments in the principal Brief on appeal urged that Peng and Watanabe do not teach or suggest all of the features of the claimed invention as topic number 1 at page 5 and alleges that there is no proper motivation to combine Peng and Watanabe in topic 2 at page 7. We strongly disagree with these views in part because of what we have already found to have been taught in Peng as just noted.

The focus of Appellants' arguments begins with the position at page 5 that Peng does not relate to plural languages. It appears to us from our review of Peng that the artisan would consider the various fonts as different languages. The initial showing in figure 1 and the paragraph bridging columns 3 and 4 of Peng were relied upon by the Examiner in the Statement of the Rejection and reemphasized in the Answer in the Responsive Argument portion of it at pages 11 and 12. There is no corresponding additional complaint in the Reply Brief as to this feature. Indeed, figure 1 utilizes various diamond-shape boxes, which are conventional in the software programming arts, to represent decision blocks which implicitly include compare or matching operations. Thus, the characterization in the text of the noted paragraph of "determining" implicitly teaches compare and matching features of the evaluating clause argued by Appellants at pages 6 through 8 of the principal Brief and reargued beginning at page 2 of the Reply Brief.

Additionally, this portion of Peng as relied upon by the Examiner does indicate that there are languages that are either taught or otherwise contemplated with respect to Peng's general flow chart figure 1. The teaching at the bottom of column 3 emphasizes the ability to discriminate such as to determine Asian language fonts among other language fonts. This determining ability is also discussed with respect to Hebrew in figure 6 and element 178 in this figure at the bottom of column 5. Note also the showing in figure 7 and the paragraph bridging columns 5 and 6 with respect to Far Eastern languages. Thus, determining a font determines a language from the printer's perspective.

With respect to Watanabe the essential position at pages 6 and 7 of the principal Brief on appeal is that this reference processes character strings only from a known language (either version of Japanese characters). Thus, Appellants urge that "Watanabe only suggests processing character strings that include characters corresponding to a *single* known language." We likewise disagree with these views since the teachings at column 6 of Watanabe and the paragraph bridging columns 27 and 28 appear to us to teach the ability to discern character strings among a plurality of languages in addition to the dominant teaching in Watanabe relating to determining the kana or kanji fonts of Japanese.

Since we believe the artisan would aptly characterize the teachings and showings in Watanabe as buttressing those already in Peng, we do not agree with Appellants characterization in the Brief and Reply Brief that there is no proper motivation to combine these references. The artisan may well consider the teachings of Peng to be sufficient alone to have rendered obvious the subject matter of the rejected representative independent claim 1

on appeal. We are therefore as well unpersuaded of any impermissible hindsight as set forth at pages 3 and 4 of the Reply Brief. A particular note here as well is that the subject matter of representative independent claim 1 on appeal does not explicitly recite processing a character set by individually comparing characters in the character set with characters in a plurality of candidate character sets to identify matches as urged at the middle of page 3 of the Reply Brief. Only a portion of the character strings are processed in the comparing operation in the evaluating clause in a manner similar to the general teachings of Peng and Watanabe.

For the reasons set forth by the Examiner in the Answer we also sustain the rejection of dependent claims 5, 15, 25 and 35 further relying upon Schulze. Although the argument at page 8 of the Brief is characterized as urging no proper motivation exists for further adding Schulze, Appellants at the bottom of page 8 do not really deny the combinability of the teachings of Schulze to those of Peng and Watanabe where it is said “even if this was true.” Contrary to the position urged there the Examiner in our view has amply characterized his initial statement of the motivation to add Schulze to the teachings and showings in Peng and Watanabe at pages 10 and 11 of the Answer, which has been further embellished at page 13. To be able to automatically determine the predominant language of a simple text using probability data, such as those n-grams of the type broadly set forth in representative dependent claim 5 on appeal, would have been an obvious enhancement to the combined systems of Peng and Watanabe. Whereas the artisan may well consider the combination of teachings of Peng and Watanabe as being word or symbol based, Schulze has the capability of increasing the possibility of quickly and more accurately determining a

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predominant language by the additional use of n-gram probability data.

Page 4 of the Reply Brief does not reargue against the Examiner's positions with respect to this second rejection of the claims on appeal.

Therefore, in view of the foregoing, the decision of the Examiner rejecting all claims on appeal under 35 U.S.C. §103 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR §1.136(a). See 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

PGC

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